Environment Agency

John Holmes
Kirklees Metropolitan Borough Council
Development Management

By email: dc.admin@kirklees.gov.uk

Our ref: RA/2022/144856/02-L01
Your ref: 2022/92459

Date: 03 February 2023

Dear John

CONVERSION OF FORMER MILL TO FORM 5 APARTMENTS INCLUDING EXTENSION AND ALTERATIONS, ERECTION OF 2 DETACHED DWELLINGS AND DEMOLITION OF OUTBUILDING.
BANKGATE MILLS, BANK GATE, SLAITHWAITE, HUDDERSFIELD, HD7 5DL

Thank you for re-consulting us on this application following submission of a flood risk assessment (FRA) and additional information / amended plans, which we received on 16 January 2023. Unfortunately, our concerns have not been adequately addressed and we maintain our objections to this application for the reasons given below.

(Note to LPA - Although some new drawings have been submitted which relate to this development, we note that drawing 2605 (0-)03 Proposed Floor Plans & Cross Sections (published on 11/01/2023) and drawing 2605 (0-)06 Proposed Elevations (also published on 11/01/2023) by One 17 Architects relate to a different site in Slaithwaite.)

Objection 1 - Building next to a main river/flood defence/culvert
Environment Agency position
We object to this application as it involves building over/works within 8 metres of main river Outlet Slaithwaite Reservoir, the culvert and natural high ground wall. As submitted, it is unlikely that we would grant a flood risk activity permit for this application.

Reasons
- The proposed development may obstruct flood flows, thereby increasing the risk of flooding
- The proposed development is likely to adversely affect the construction and stability of the culvert and natural high ground wall which will compromise its function. The proposal will therefore increase the risk of flooding.

Overcoming our objection
Our permitting role is not to approve the design of a development. As per our previous response the works are in the immediate vicinity of a reservoir emergency spillway structure, guidance and final approval must be obtained from the Qualified Reservoir Panel Engineer (also known as the Reservoir's Supervising Engineer) for the reservoir before any construction can be approved. They may dictate a Reservoir Construction Engineer needs to be appointed for the duration of the works. The current Supervising Engineer will have been appointed by the reservoir owner and therefore contact needs

to be sought through them to ensure the correct engineer is identified.

The Flood Risk and Drainage Teams at the Council and Canal and Rivers Trust (CRT) the reservoir owners will hold further information on the reservoir spillway and any other culverts/privately owned assets within this area in relation to the development.

We are unable to say whether it is likely we would grant an Environmental Flood Risk permit for this application without further information on the development and new walls in relation to main river, the existing wall classed as natural high ground, the non-main river culvert and the reservoir spillway. We require the following further information:

- The FRA needs to indicate the distance of the development and new wall proposed in metres from the Main river "Outlet Slaithwaite reservoir", the existing natural high ground wall, privately owned culvert with non-main river running through it and reservoir spillway.
- We normally expect an 8m easement of any works from main river edge or the landward face of a flood defence wall. Access needs to be maintained such as for example for maintenance purposes and operational response.
- The FRA indicates the bank slope down to the reservoir boundary will be re-engineered to improve stability and increase parking for the development. We require cross sections and levels in mAOD pre and post development. The FRA needs to demonstrate this will have no impact structural integrity of reservoir or other assets.
- We need confirmation that development of the site will not have any detrimental impact on the flood defence walls/culvert/spillway which could compromise their function and increase the risk of flooding to people and properties. This includes ensuring the development will place no additional loading either vertically or horizontally on the fabric or structural integrity of the flood defence walls/spillway.
- We require confirmation from the Reservoir Supervising engineer, structural engineers, Building Control team and Flood Risk and Drainage Teams at the Council that the works meet their requirements ensuring there is no increase in flood risk.

The River 'Outlet Slaithwaite Reservoir' is designated as a Main River for regulation purposes, however any damage to the privately owned flood defences or damage to the non-main river culvert or spillway as a result of the development is the responsibility of the riparian owner (i.e. the landowner) who is responsible for ensuring no transfer of flood risk to others from for example damage to flood defences which may result in overland flows.

Inspecting the river side would be the primary responsibility of the riparian owner (ie the land owner) for the maintenance of the watercourse so they need to ensure access can be gained to fulfil their riparian obligations. As they are a privately owned flood defence/ culvert /reservoir spillway you need to agree a maintenance plan for the lifetime of the development with the Flood Risk and Drainage Team at Kirklees Council.

Objection 2 - Inadequate FRA
Environment Agency position
In the absence of an acceptable flood risk assessment (FRA) we object to this application and recommend that planning permission is refused.

Reasons
The submitted FRA does not comply with the requirements for site-specific flood risk assessments, as set out in paragraphs 20 to 21 of the Flood Risk and Coastal Change section of the planning practice guidance and its site-specific flood risk assessment

checklist. The FRA does not therefore adequately assess the flood risks posed by the development. In particular, the FRA fails to:

- Assess the flood risk to the site taking into account climate change allowances
- Provide flood risk mitigation measures to address flood risk
- Provide safe access and egress routes

Overcoming our objection

Assess the flood risk to the site

An FRA needs to assess the flood risk to the site from up to and including the 1% plus climate change allowances. This is to show the existing flood risk to the site and that there is no increased flood risk, no loss of flood storage volume, or transfer of flood risk to others, including not allowing water to spill into nearby watercourses, as a result of the development.

The reservoir is owned by the Canal and Rivers Trust so we advise you contact them and the Flood Risk and Drainage Team at the Council regarding any further flood risk information on the reservoir and any consents required from them for works.

The FRA assesses the flood risk to the site however this has not been based on the flood model node information upstream of the site. We normally expect the highest upstream node to be used to provide a worst-case picture of the flood risk to the site. The nodes within the Slaithwaite 2019 model upstream of the culvert outlet are higher than the node used adjacent to the site and downstream and therefore should be considered in the assessment of flood risk to the site up to the 1% plus climate change level.

Flood Risk Mitigation - FFL/Resilience

The site is largely flood zone 1, with areas of the site boundary within flood zone 2, and is on the edge of flood zone 3. The southern boundary is close to the extent of reservoir flooding.

We normally expect finished floor levels and any flood sensitive equipment for residential development are raised to the higher of the 1% plus climate change level plus 600mm, or highest recorded flood level using the most up to date climate change allowances. In addition, we recommend flood resilience to the design level as indicated above.

Lower Ground floor

The FRA needs to indicate the finished floor levels in relation to the requirement above for the mill conversion and new properties. The two new build properties include sleeping accommodation below current ground levels and on stilts in close proximity to the reservoir.

The plans show more vulnerable sleeping accommodation in the lower ground floor. The classification of a basement from Building Regs Approved Document B is – “A storey with a floor which at some point is more than 1200mm below the highest level of ground adjacent to the outside walls”. The FRA needs to confirm if the lower ground floor is a basement.

We do not expect to see more vulnerable sleeping accommodation in basements. Habitable uses of basements within flood affected areas should not be permitted due to the potential dangers to life during a flood. Any room below adjacent ground level would fill with water first in a flood so should be treated with caution and a flood emergency plan produced.

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Stilts
It is not clear why the stilts are proposed as part of the development or if they are over the reservoir spillway. The use of stilts or voids is not floodplain compensation but mitigation of risk by design. The use of stilts reduces the impact of the development but does not guarantee the floodplain will be retained in the same way as a compensation storage scheme. The FRA needs to ensure the use of stilts does not result in any loss of storage up to the 1% plus climate change flood level or obstruct operation of the spillway.

The works are in the immediate vicinity of a reservoir emergency spillway structure, guidance and final approval must be obtained from the Qualified Reservoir Panel Engineer (also known as the Reservoir's Supervising Engineer) for the reservoir before any construction can be approved. They may dictate a Reservoir Construction Engineer needs to be appointed for the duration of the works. Consultation may be required with the Kirklees Council Building Control officer.

Compensatory Storage
The FRA needs to indicate existing and proposed site levels in mAOD. The existing ground levels determine the current flood risk to the site. The FRA needs to indicate whether any ground levels are being altered up to and including the 1% plus climate change level.

The FRA indicates the bank slope down to the reservoir boundary will be re-engineered to improve stability and increase parking for the development. We require cross sections and levels in mAOD pre and post development. The revised drawings show a new wall proposed in close proximity to the reservoir spillway, further details are needed on the distance from the spillway in metres

The FRA needs to demonstrate there will be no impact on the structural stability of the reservoir and no loss of flood storage up to and including the 1% plus climate change level. Such as through raising of site levels, buildings, stilts, bank engineering or the new wall proposed which require an assessment of the requirement for compensatory storage. The FRA needs to indicate flood flow routes will not be altered as a result of the development.

Access/Egress
Although the site is within flood zone 1 lower ground floor sleeping accommodation below the current ground levels is currently proposed. The flood zones are based on current ground levels. The FRA needs to demonstrate safe access / egress is provided for site users, up to and including the design event (1% AEP CC). Wherever possible, safe access routes should be provided that are located above design flood levels and avoiding flow paths (i.e. 'dry')". If 'dry' safe access/egress is not possible, the proposed routes can be 'wet' but must be 'safe'. This is defined by the UK flood hazard rating using the FD2320 methodology, calculated according to flood depth, velocity and likely debris factor.

We are not the competent authority on matters of safe access/egress or emergency planning. Our role is to ensure that enough data is available within the FRA for the LPA/LLFA/emergency planners to make an informed decision. As a minimum, the FRA should either demonstrate a dry access/egress route or an assessment of a proposed 'wet' route using FD2320. If no safe route is possible and the applicant intends to rely on an emergency plan, then sufficient data needs to be included in the FRA for the decision maker to understand whether emergency planning proposals are acceptable.

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This includes, but might not be limited to, information on flood extents and velocities. We recommend that the applicant discusses this further with the relevant competent authority.

INFORMATIVES

Environmental permit - advice to applicant
The Environmental Permitting (England and Wales) Regulations 2016 require a permit or exemption to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in the floodplain of a main river the activity could affect flood flow or storage and potential impacts are not controlled by a planning permission

For further guidance please visit https://www.gov.uk/guidance/flood-risk-activities-environmental-permits or contact our National Customer Contact Centre on 03708 506 506 (Monday to Friday, 8am to 6pm) or by emailing enquiries@environment-agency.gov.uk.

The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Compensatory storage
Where a development is likely to increase flood risk by taking up flood plain storage, it may be necessary to provide compensatory storage to mitigate this risk. Compensation works are divided into direct and indirect. These terms come from CIRIA report C624 "Development and flood risk – guidance for the construction industry (2004)".

Direct or 'level for level' methods as they are also known re-grade the land at the same level as that taken up by the development. Direct schemes therefore provide a direct replacement for the lost storage volume. Indirect methods rely on water entering a storage area which then releases water at a slower rate, akin to a surface water attenuation scheme. The storage area can be remote from the flood plain or even a tank. Indirect schemes are complicated to design and construct and require a more intensive maintenance regime, which must be continued indefinitely. For these reasons we are generally opposed to indirect schemes unless a planning decision has already been made and they are the only remaining option.

Planning Advice Service
Please advise the applicant that if they would like to get further specific advice on how to overcome our objection, they can take advantage of our planning advice service. We can offer services including meetings, telecons and reviews of revised information prior to formal submission. We encourage the applicant to contact us directly to discuss this further.

We currently charge £100 plus VAT per officer per hour. We will provide you with an estimated cost for any further discussions or review of documents. The standard terms for our charged for service are available here.

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Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me.

Yours sincerely

Bev Lambert
Sustainable Places - Planning Advisor

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